Work Order ID 94	1833
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Quality Control

\*94833\*

Page 1

December-20-12 10:21:34 AM Accept \*N900040100\* Item ID: D3255-1 Setup Start **Revision ID:** Stop Item Name: Panel \*4\* Start Qty: 4.00 **Start Date:** 12/19/12 **Cust Item ID:** Required Date: 12/19/12 Req'd Qty: 4.00 **Customer:** Reference: Run Start Date: 13013 Tooling: Approvals: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Set Up/ Tool ID Tool # Plan Reject Reject Operation Accept Insp. **Work Center ID** Qty Number Stamp Description Code **Qty Run Hours** Draw Nbr **Revision Nbr** D3255 Rev B 100 0.00 4 FLOW WATER JET \*100\* B 13-1-23 Waterjet 0.00 Memo **B** Prog Rev: **B** 2-FLOW CNC Waterjet 1-Cut as per Dwg D3255 Dwg Rev: Deburr if necessary 304.052 QC2- Inspect parts off machine FAI/FAIB 110 0.00 \*110\* 13-1-23 QC 0.00 Memo Quality Control 120 QC8- Inspect parts - second check \*120\* QC Memo

										DQA:	Date	
NCR:	Yes	/ No				WORK ORDER NON-C	ONFOR	MANCE / UPDATI	E			٠.
										QA Closed:	Date	
Work Orde	er:					DISPOSITION		A	GAINST DE	PARTMENT	/PROCESS	
Part N	 No					Rework Scrap Use-as-is Work Order Update	Thei	Machining Sn moforming F	osstube mall Fab inishing mposite	l	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root	T				Descri	ption of work order update	Initial	Action		Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Chief En	g Description	n	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling						•						
Operator												
Material												
Setup												
Other												
Process												
Supplier												
Training												
Unapproved												
						F	<b>AULT CAT</b>	EGORY				
Landi	ng Ge	ear				General				_		_
	В	Bending				Bend	Grain			Ovalized	_	Pressure/Forced
		entre No	ot Concer	ntric to	o/s	BOM/Route	Hardv	vare		Over/Under	tolerance	Temperature/Cure
		racks				Broken/Damaged	Inspe	ction Incomplete		Part Incorre	ct	Weld
		rushed/0	Crimped.			Burrs	Instru	ctions Incomplete/Unclea	ar 🗍	Part Lost/M	issing	Wrong Stock Pulled
		uffs				Contamination	_	tenance		Part Moved	_	_
	П	leat Trea	t			Countersink	Misla	peled		Positioned \	<b>N</b> rong	
	$\Box$ "	nspection	n Strip in	Tube		Cut Too Short	Misre	ad		Power Loss/	/Surge	Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Ord December-20-1				*948	333*			·			Page 2	
Item ID: Revision ID: Item Name: Start Date: Required Date	D3255-1  Panel  12/19/12  2: 12/19/12	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*	Accept	*N9000  Cust Item II  Customer:		100	)* s	etup Star Stop	1.77	S1* S2*	
Reference: Approvals:		an:	Date:	Tooling: SPC (Y/N):		te:		R	un Stai	I/I	R1* R2*	
Sequence ID/ Work Center 130 *130* Brake NC		Operation Description  NC BRAKE Memo		Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp.	
140 *140* QC		Form as per  QC5- Inspect part comp  Memo	Dwg D3255	0.00 (PAS 15 0.00 13-1,3	<b>&gt;</b>			7			13-01	-31

150

Identify as per dwg & Stock Location: WO

0.00

\*150\* Packaging

Quality Control

Memo

Memo

0.00

Packaging

				DQA:	Date:	
NCR: Yes / No	WORK ORDER NON-CO	NFORMANCE / UF	PDATE	<del></del>	- <del>-</del>	
				QA Closed:	Date:	
Work Order:	DISPOSITION		AGAINST DEP	ARTMENT/PRO	OCESS	
	Rework	Skid-tube	Crosstube	V	Vater Jet	Engineering
Part No.	Scrap Scrap	Machining	Small Fab	Prod. Er	ng. Coor.	Quality
-	Use-as-is	Thermoforming	Finishing	Rec/Store/Page 1	ackaging	Other
NCR No.	Work Order Update	Large Fab	Composite		Supplier	

NCR No					Work Order Update	]	•	Large Fab	Composite	 Nec/3to	Supplier	J Other
Root				Descrip	otion of work order update		Initial	А	ction	Sign &		
Cause	Date	Step	Qty	o	r Non-conformance	Ch	nief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling					•	į						
Operator								i				
Material	]	1										
Setup				•								
Other	]		i i									
Process	1											
Supplier	]											
Training								·				
Unapproved												
						FAUI	LT CATE	GORY				:
Landing	Gear				General			4				_
	Bending				Bend		Grain			Ovalized		Pressure/Forced
	Centre No	ot Concer	ntric to O	/S	BOM/Route		Hardwa	ire		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	ion Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs		Instruct	ions Incomplete	e/Unclear	Part Lost/M	issing	Wrong Stock Pulled
Γ	Cuffs				Contamination		Mainte	enance		Part Moved		_
	Heat Trea	it			Countersink		Mislabe	eled		Positioned V	Vrong	
	Inspection	n Strip in	Tube		Cut Too Short		Misread	d		Power Loss/	Surge	Other
	Ripples in	Bend			Drill Holes		Offset			=	_	
	Torque W	aves in E	xtrusion		Drawing	Г	Out of (	Calibration				
	Turning S	equence			Finish		Out of 9	Sequence				
Γ	Wave/Tw	ist in Tub	oe .		Folio		Outside	Dimensions			·	

<b>Work Orde</b> December-20-12				*948	3.3.3*							Page 3
Item ID: Revision ID: Item Name:	D3255-1			Accept	*N900	<b>1</b> 040	100	*	Setup	Start Stop		S1* S2*
Start Date: Required Date: Reference:	12/19/12 12/19/12	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item Customer				_			
Approvals:	Process P	lan:	Date:	Tooling: SPC (Y/N):		Date:			Run	Start Stop		R1* R2*
Sequence ID/ Work Center II	<b>D</b>	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
*160 *160* QC		QC21- Final Inspection	Work Order Release	0.00					MU	.5	13-0	2-01

Quality Control

			•								DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-	O	NFORN	AANCE / UPD			5 .	
					···-·	Y					QA Closed:	Date:	
Work Orde	er.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
· Part I	Part No.  NCR No.  Root Cause Date Step Qty  c/Data aip/Tooling erator aterial cup her ocess pplier aining				Rework Scrap Use-as-is Work Order Update	Scrap Machining Small Fab e-as-is Thermoforming Finishing			Pro Rec/Stor	Engineering Quality Other			
Root					Descri	ption of work order update		Initial	Acti	on	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Cr	nief Eng	Descri	ption	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved				·	·								
						F	AUI	LT CATE	GC <sup>I</sup> RY				
Landi		Bending Centre N Cracks Crushed/ Cuffs Heat Trea Inspectio	Crimped at n Strip in	-	o/s	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short		Instruct Mainte Mislabe Misreac	on Incomplete ions Incomplete/U nance led	Inclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Ripples ir	n Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

December-20-12 10:21:34 AM

Work Order ID:

94833

Parent Item:

D3255-1

Parent Item Name:

Panel

Start Date: 12/19/12

Required Date: 12/19/12

Start Qty: 4.00

Required Qty: 4.00

Comments:

IPP Rev:A New Issue 06-08-01 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Date Issued Issued	Status
M304S22GA		Purchased	No			100	sf	239.2600	1.484	6.2484212		
304/316 .032 Sheet											<u> 18(3-1-</u>	<del>3</del> 3

<b>Location</b>	Loc Qty	Loc Code	
MAT020	239.26		(i)
118271	17.76		118.27/ 14
120866	65.6		
121889	155.9		1

			DQA:
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE	

NCR: Y	es / No				WORK ORDER NON-	CONFOR	IMANCE / UP	VUATE	QA Closed:	Date:	
Work Orde	r:				DISPOSITION		<u> </u>	AGAINST DE	PARTMENT	/PROCESS	
Part N					Rework Scrap		Skid-tube Machining	Crosstube Small Fab	4	Water Jet d. Eng. Coor.	Engineering Quality
NCR N	o				Use-as-is Work Order Update	]   Iner	moforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	Other
Root				Descri	iption of work order update	Initial	Ac	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	g Desc	cription	Date	Verification	QC Inspector
Doc/Data											
quip/Tooling											
Operator											
Material	_										
Setup											
Other											
Process	_										
Supplier	_	ł									
Fraining	4										
Jnapproved							56687			1	1
						AULT CAT	EGURY				
Landir	Bending			_	General Bend	Grain		<u> </u>	Ovalized		Pressure/Forced
}	Centre No	at Canaci	atria ta (	~  -	BOM/Route	Hardw			Over/Under	talorance	Temperature/Cure
}	Cracks	or concer	itric to t	<sup>5/3</sup>  -	Broken/Damaged	<b></b>			Part Incorre	<del> </del>	Weld
	Crushed/	Crimpod		-	Burrs	_	tion Incomplete ctions Incomplete	/Uncloar	Part Lost/M	<b> </b>	Wrong Stock Pulled
ŀ	Cuffs	crimpeu.			Contamination	<b></b>	enance	/Officieal	Part Moved	· ·	_ wrong stock Fulled
ŀ	Heat Trea	.+		<u> </u>	Countersink	Mislat		<del> </del>	Positioned \		
}	Inspection		Tuha	$\vdash$	Cut Too Short	Misre		<del> </del>	Power Loss		Other
}	Ripples in	•	·ube	$\vdash$	Drill Holes	Offset		<u>L</u>	J. Ower Loss/	Juige	Potrici
-	Torque W		ytrusion	, <u> </u>	Drawing	$\vdash$	Calibration				
ŀ	Turning S			;	Finish	<b>—</b>	Sequence				
t	Wave/Tw			-	Folio	$\vdash$	le Dimensions				
1				1							

Date:

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DART AEROSPACE LTD	Work Order:	94833
Description: Access Panel Assembly	Part Number:	D3255-1
Inspection Dwg: D3255 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X	First Article	Prototyp	е
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.004/-0.001	.099	2		UBOZ	
15.171	+/-0.010	15,171	\ \		7 BOI	
10.032	+/-0.010	10.035			7	
6.902	+/-0.010		7		7	,
18.456	+/-0.010	6.900 18.426			7	
11.432	+/-0.010	(1,435	1		1	
						-
				.,		
		***				
	`					
		L	VAS	<u>,                                     </u>		

Measured by: 3	Audited by:	Prototype Approval:	N/A
Date: 13-1-33	Date: 13-123	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	07.01.17	New Issue	KJ/JLM	

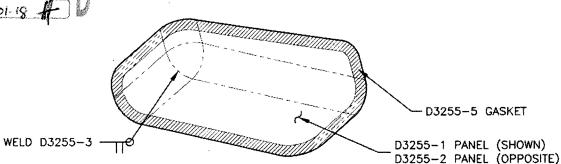


ſ	DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
T	CHECKED	APPROVED	DRAWING NO.	REV. B	
	U/	#	D3255	SHEET 1 OF 4	
T	DATE		TITLE	SCALE	
$oldsymbol{\perp}$	04.12.06		ACCESS PANEL ASSEMBLY	1:6	
	Α	04.01.27	NEW ISSUE		

D3255-3 REDESIGN: ADDED Ø0.098

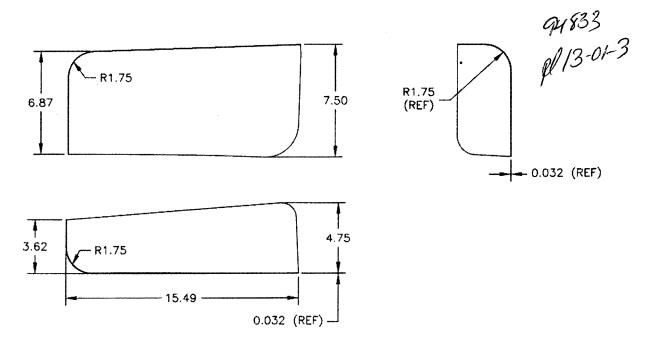


В



04.12.06

#### D3255-041 ACCESS PANEL (SHOWN) D3255-042 ACCESS PANEL (OPPOSITE)



# D3255-1 BEND DETAIL D3255-2 OPPOSITE

D3255-041/-042 NOTES:

1) WELD PER DART QSI 004

2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER QSI 005 4.3

3) INSTALL D3255-5 GASKET USING DOW CORNING P/N 736 ADHESIVE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS

4) IDENTIFY WITH P/N & B/N USING FINE POINT PERMANENT MARKER

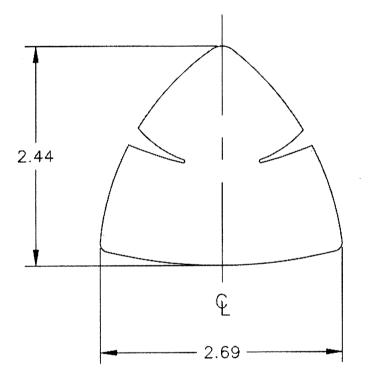
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DESIGN	DRAWN BY		ROSPACE LTD y, ontario, canada
CHECKED	APPROVED	DRAWING NO.	REV. B
97	#	D3255	SHEET 2 OF 4
DATE		TITLE	SCALE
04.12.06		TITLE	1:1





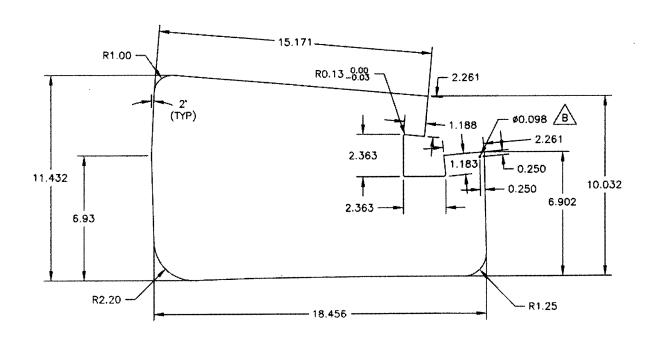
D3255-3 CAP FORM TO FIT D3155-1/-2

#### D3255-3 NOTES:

- 1) MATERIAL: AISI 304/316 SS 0.032 THICK (REF. M304S22GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLÈSS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) MAKE PER DRAWING "D3255-B2.DWG"



DESIGN 京井	DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, CAI	
CHECKED	APPROVED	DRAWING NO.	REV. B
W.	#	D3255	SHEET 3 OF 4
DATE		TITLE	SCALE
04.12.06		ACCESS PANEL ASSEMBLY	1:5



q4833

### D3255-1/-2 FLAT PATTERN

#### D3255-1/-2 NOTES:

- 1) MATERIAL: AISI 304/316 SS 0.032 THICK (REF. M304S22GA)
  2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

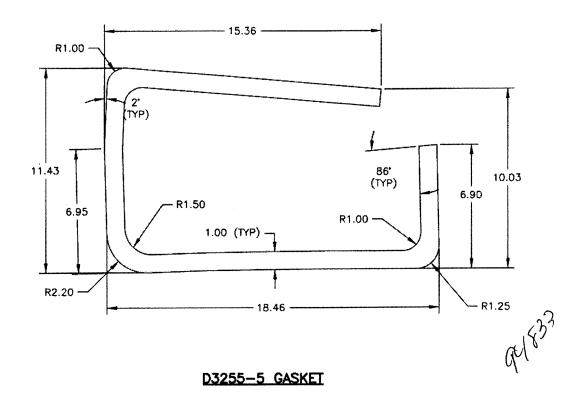
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DESIGN 1-1	DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, CAN	
CHECKED	APPROVED	DRAWING NO.	REV. B
1 4	1	D3255	SHEET 4 OF 4
DATE		TITLE	SCALE
04.12.06		ACCESS PANEL ASSEMBLY	1:5





#### D3255-5 NOTES:

- 1) MATERIAL: SILICONE COATED FIBERGLASS CLOTH PER AMS 3320F P/N SIL/F 36x36x1/16
- POSSIBLE SUPPLER: AVIALL
  2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
  3) ALL DIMENSIONS ARE IN INCHES

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